

XP-002097496

1/1 - (C) WPI / DERWENT
AN - 94-328998 §41!
AP - JP930063515 930226; §Div ex! JP930063515 930226;
JP960217949 930226
PR - JP930063515 930226; JP960217949 930226
TI - Recombinant prodn. of nucleoside phosphorylase - and
use of the enzyme for the prodn. of nucleoside
IW - RECOMBINATION PRODUCE NUCLEOSIDE PHOSPHORYLASE ENZYME
PRODUCE NUCLEOSIDE
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PN - JP6253854 A 940913 DW9441 C12N15/54 019pp
- JP9019293 A 970121 DW9713 C12N15/09 016pp
ORD - 1994-09-13
IC - C07H21/04 ; C07K14/32 ; C12N1/21 ; C12N9/10 ; C12N9/12 ;
C12N15/09 ; C12N15/54 ; C12P19/38
FS - CPI
DC - B04 D16
AB - J06253854 A nucleoside phosphorylase is claimed,
encoded in a structural gene originating from a
thermophilic bacteria belonging to the *Bacillus* genera.
- USE - The enzyme can be used for prodn. of nucleosides.
- In an example, *Bacillus stearothermophilus* TH6-2 was
used as the source for the nucleoside phosphorylase.
Three kinds of vectors for high expression of purine
nucleoside phosphorylase (pTrc-punA), pyrimidine
nucleoside phosphorylase (pTrc-pyn) and purine and
pyrimidine nucleoside phosphorylase (pTrc-NE) were
prepd. In order to prepare pTrc-punA, plasmid vector
pTc99A (Gene, 69, 301 (1988), Pharmacia) was treated
with NcoI and SmaI. A NcoI-HpaI DNA fragment contg. the
purine nucleoside phosphorylase structural gene and SD
sequence was ligated with the above cleavage fragment
of pTc99A to produce a construct comprising the SD
sequence and nucleoside phosphorylase structural gene
just after trc promoter for expression of pTc99A.
E.coli JM 105 was transformed with the above ligation
mixture. *E.coli* retaining each of the above vectors
were cultured and then treated with lysozyme to obtain
the phosphorylases.